

WHAT IS CLAIMED IS:

1. A computer comprising:
an operating system controlling a computer resource; and
an intrusion detection system integrated with the operating system and
operable to monitor the computer resources to detect and prevent intrusion attempts.

2. The computer, as set forth in claim 1, wherein the computer resource is
selected from the group consisting of data storage system, input/output system, a
networking system, an application program execution environment, and interfaces to
peripheral devices.

3. The computer, as set forth in claim 1, wherein the computer resource
comprises an application program execution environment and a networking system
under the control of the operating system and monitored by the intrusion detection
system to detect, prevent and report intrusion attempts.

4. The computer, as set forth in claim 1, further comprising an anti-virus
system integrated with the operating system and operable to monitor the data storage
system, input/output system, networking system, application program execution
environment, and interfaces to peripheral devices to detect the presence of at least one
virus.

5. The computer, as set forth in claim 1, further comprising an anti-virus
system integrated with the operating system and operable to monitor the data storage
system, input/output system, networking system, application program execution
environment, and interfaces to peripheral devices to detect and report the presence of
at least one virus.

6. The computer, as set forth in claim 2, wherein intrusion detection is
integrated with a networking stack of the networking system above the link layer
operable to access raw network frames.

7. The computer, as set forth in claim 2, wherein the intrusion detection system is integrated with a networking stack of the networking system above the network layer operable to access reassembled fragments.

5 8. The computer, as set forth in claim 2, wherein the intrusion detection system is integrated with a networking protocol stack of the networking system above the transport layer.

10 9. The computer, as set forth in claim 2, wherein the intrusion detection system is integrated with a networking stack of the networking system between the network layer and the transport layer and between the transport layer and the application layer.

15 10. The computer, as set forth in claim 5, wherein the anti-virus system comprises a module operable to prevent reassembly of a virus.

20 11. The computer, as set forth in claim 5, wherein the anti-virus system comprises a module operable to recognize a virus.

25 12. The computer, as set forth in claim 5, wherein the anti-virus system comprises a module operable to prevent storage of a virus.

30 13. The computer, as set forth in claim 5, wherein the anti-virus system comprises a module operable to prevent transmission of a virus.

14. The computer, as set forth in claim 2, wherein the anti-virus system comprises a module operable to prevent execution of a virus.

15. A method comprising:
executing an OS-integrated intrusion detection system; and
monitoring at least one computer resource to detect and prevent intrusion attempts.

16. The method, as set forth in claim 15, wherein monitoring at least one computer resource comprises monitoring at least one computer resource selected from the group consisting of a data storage system, an input/output system, a networking system, an application program execution environment, and interfaces to peripheral devices.

17. The method, as set forth in claim 15, wherein monitoring at least one computer resource comprises reporting intrusion attempts.

18. The method, as set forth in claim 16, further comprising integrating the intrusion detection system with a networking system above the link layer operable to access raw network frames.

19. The method, as set forth in claim 15, further comprising integrating the intrusion detection system with a networking stack of the networking system above the network layer operable to access reassembled fragments.

20. The method, as set forth in claim 15, further comprising integrating the intrusion detection system with a networking protocol stack of the networking system above the transport layer.

21. The method, as set forth in claim 15, further comprising integrating the intrusion detection system with a networking stack of the networking system between the network layer and the transport layer, and between the transport layer and the application layer.

22. A method comprising:
executing an OS-integrated anti-virus system; and
monitoring at least one computer resource to detect the presence of at least one virus.

23. The method, as set forth in claim 22, wherein monitoring at least one computer resource comprises monitoring at least one computer resource selected from the group consisting of a data storage system, an input/output system, a networking system, an application program execution environment, and interfaces to peripheral devices.

24. The method, as set forth in claim 22, wherein monitoring at least one computer resource comprises reporting the presence of at least one virus.

25. The method, as set forth in claim 22, wherein the step of monitoring comprises detecting the reassembly of a virus.

26. The method, as set forth in claim 22, wherein the step of monitoring comprises recognizing a virus.

27. The method, as set forth in claim 22, wherein the step of monitoring comprises preventing the storage of a virus.

28. The method, as set forth in claim 22, wherein the step of monitoring comprises preventing the transmission of a virus.

29. The method, as set forth in claim 22, wherein the step of monitoring comprises preventing the execution of a virus.